

I. APPENDIX: REPRESENTATION TERMS GUIDE

Representation Term	NINDS Data Type	Definition	Abbreviation for Variable Name
Anatomic Site	Alphanumeric	the named location of, or within, the body of a living being	AnatSite
Category	Alphanumeric	the descriptive identification representing a level of intensity, defined meaning, or subjective measurement	Cat
Code	Alphanumeric OR Numeric Values	the selection from a system of defined categories for representation of data, often defined using stratification or hierarchical organization; data may have either a numeric or alphanumeric system assigned for coding	Code
Count	Numeric Values	the quantity of the specified item	Ct
Date	Date or Date & Time	the date on which an event was observed or occurred	Date
Date/Time	Date or Date & Time	the date and time when an event was observed or occurred	DateTime
Dose	Numeric Values	the quantity of an agent (such as drug, substance or energy) administered, taken, or absorbed at one time	Dose
Duration	Numeric Values	the value measuring a quantity or period of time during which an event or observation occurs	Dur
Frequency	Numeric Values	the number of occurrences counted for an event within a given time period	Freq
Grade	Alphanumeric OR Numeric Values	the position on a scale of intensity or amount or quality, of or relating to	Grade

		histology; data may have either a numeric or alphanumeric system for grading	
Indicator	Alphanumeric	the response for yes/no/unknown/NA)	Ind
Integer	Numeric Values	a concept of quantity using only whole numbers greater than zero	Intg
Interval	Numeric Values	the period of time or the distance separating occurrences	Intrvl
Location	Alphanumeric	the field to describe the geographic area (not anatomic)	Loc
Measurement	Numeric Values	the size or magnitude of the specified item	Measr
Name	Alphanumeric	the words or language units by which an object is known	Name
Number	Numeric Values	a concept of quantity derived from zero and units or a numeral or string of numerals used for identification	Num
Range	Numeric Values	the value chosen from the limits or scale of variation for an event or the difference between the lowest and highest numerical values	Rng
Rate	Alphanumeric OR Numeric Values	the measurement of degree, speed, or frequency relative to time with regard to an observation or event; data may be a numeric quantity or may be reported by enumerated values with grouped ranges of values	Rt
Reason	Alphanumeric	the explanation of the cause of some phenomenon or action	Rsn
Scale	Numeric Values	the numeric value representing the position in a range of numeric values for level of intensity, defined meaning or subjective measurement	Scl

Score	Numeric Values	the numeric value used in calculation for the position in a range of numeric values representing level of intensity, defined meaning or subjective measurement	Score
Site	Alphanumeric	the field to describe the area (not anatomic)	Site
Source	Alphanumeric	the text describing where something is available or referenced	Source
Status	Alphanumeric	the condition or state at a particular time	Stat_or Status
Text	Alphanumeric	the undefined field to capture descriptive information related to an item	Txt
Time	Date or Date & Time	the time at which an event was observed or occurred	Time
Type	Alphanumeric	the enumerate descriptive information to identify an item	Typ
Unit of Measure	Alphanumeric	the name of a reference standard used for measurement when determining a quantity	UOM
Value	Numeric Values	the numeric quantity measured, assigned or computed	Val

APPENDIX B: VARIABLE NAME ABBREVIATION GUIDE

Amnesia=Amns
Abbreviated Injury Scale=AIS
Abnormality=Abnrmly
Accident=Acdnt
Accumulation=Accum
Activity=Act

Admission=Adms
Advanced Surgical Associates= ASA
Alcohol=Alc
Alteration of Consciousness=AOC
Amplitude=Amp
Analysis=Anlysis
Anatomic=Antmic
Anesthesia=Anesth
Aneurysm=Anrysm
Arrival=Arrvl
Arterial=Arter
Arteriosclerosis=Artersclsis
Aspiration=Aspir
Assessment=Assmt
Associated=Assoc
Atrophy=Atrphy
Attention=Attn
Average=Avg
Behavior=Behavr
Biological=Bio
Blood=Bld
Brainstem=Brnstm
Branch=Brnch
Caliber=Calbr
Carbon dioxide= CO2
Cardiac=Card
Cardiovascular=Cardiovsclr
Caregiver=Caregvr
Cat=Category
Catheter=Cath
Center=Ctr;
Central=Centrl
Cerebral Perfusion Pressure=CPP
Cerebral Spinal Fluid=CSF
Cervicomedullary=Cervimed
Chemical=Chem
Chronic=Chrnc
Circulation=Circ
Circumference=Circumf
Cisternal=Cist
Classification=Class
Clinical =Clin

Cognitive=Cog
Collection=Coll
Combat=Cmbt
Component=Comp
Compression=Comprsn
Concomitant=Concom
Concussion=Concuss
Condition=Cond
Confounders=Confound
Constipation=Constptn
control=cntrl
Contusion=Contusn
Cortical=Cortcl
Country=Cntry
Cranial Nerves= CranlNerv
Cranial=cranl
Current=Curnt
Daily=Dly
Deepest=Dp
Definitive=Defn
Delayed=Delyd
Density= Densty
Deployed=Deployd
Deployment=Deplymt
Depressed=Deprsd
Destination=Dest
Device=Dev
Diagnosis=Diagnos
Diastolic=Diastl
Difficulty=Diffclty
Diffuse Axonal Injury=DAI
Direction=Dir
Discharge=Dischrg
Disorder=Disordr
Displacement=Disp
Dissection=Disct
Distal=Distl
Documented=Documntd
Dopamine dysregulation syndrome= DDS
Drainage=Drain
Drinks=Drnks
Drug=Drg

Dur=Duration
Dyskinesia=Dysk
Education=Edu
Effacement=Effmt;
Elevation=Elevatn
Emergency Room= ER
Emergency=Emrgy
Employment=Emplmt
Enclosed=Enc
Epidural=Epdurl
Episode=Epi
Episode=Episd
Estimation=Est
Ethnicity=Ethn
Event=Evnt
Exclusion=Xclusn
Executive=Exec
Expanded=Expnd
Expectation=Expectns
Exposure=Expos
Expression=Xpressn
Extenders=Extndrs
External=Ext
Extra=Xtra
Facial=Facl
Family=Fmly
Field=Fild
Field=Fild
Findings=Find
First=1 st
Fluently=Fluent
Fracture=Fract
Frequency=Freq
Gastrocnemius=Gastrocnmus
Gastrointestinal=GI
Glutamate=Glut
Greater=Gtr
Gun Shot Wound=GSW
Hallucinate=Hallucnt
Health=Hlth
Heart rate= HR
Height= Hgt

Hemorrhagic=Hem
History=Hist
Hospital=Hosp
Hypertension=Hyptnsn
Hyperthermia=Hypthrm
Hyperventilation=Hypvent
Hypocapnia=Hypocap
Hypotensive=Hypotnsn
Hypothermia=Hypoθrm
Hypoxic=Hypx
Hypoxic-ischemic=Hypxisch
Identifier=ID
Illicit=Illct
Image=Img
Imaging=Img
Immediate=Immd
Impairment=Impairmnt
Important=Importnt
Improvement=Imprvmnt
Inadvertent=Inadvrt
Inclusion=Inclusn
Income=Inc
Indicator=Ind
Infarction=Infarc
Influence=Infl
Informed Consent= InfConst
Injury=Inj
Inpatient= Inpat
Insurance=Ins
Interval=Intrvl
Intervention=Intrvnt
Intracerebral Hemorrhage=ICH
Intracranial=Intracran
Intravenous=IV
Intraventricular Hemorrhage=IVH
Ischemia=Isch
Junction=Jun
Lactate=Lact
Language=Lang
Last=Lst
Laterality=Lat
Left=Lft

Lesion=Lesn
Level=Lvl
Likelihood=Likhd
Living= Living
Location=Loc
Longer=Lngr
Loss of Consciousness=LOC
Manufacturer=Manuf
Marital=Martl
Marshall=Marsh
Maximum=Max
Measurement=Measr
Mechanism=Mech
Medical=Med
Medical=Medcl
Medication=Medctn
Mental=Mentl
Method=Methd
Microdialysis=Microdlys;
Microinfarcts=Microinfarct
Midline=Midlne
Military=Mil
Minimum=Min
Mixed=Mxd
Modality=Modlty
Monitor=Mon
Month=Mo
Morphology=Morph;
Movement= Movmnt
Multiple=Mult
Muscular=Musclr
Neurofibrillary=Neurofib
Neurologic=Neuro
Neuropathological=Neuropath
Not Applicable= NA
Number=Num
Obtained=Obt
Occurance=Occur
Ongoing=Ongng
Operations=Ops
Optional=Optnl
Orientation=Orient

Other=Othr
Outpatient-Output
Oxygen Saturation=O2Sat
Oxygen=O2
Parkinsonian=Parkinsn
Partial Pressure=PPressr
Participant=Partcpt
Participation=Prtp;
Party=Prty
Pathology=Pathlgy
Pattern=Pattn
Pediatric intensity level of therapy =PILOT
Penetrating=Pentrt
Performed=Perf
Perinatal=Perintl
Peripheral=Perphrl
Person=Prsn
Physical=Phys
Plaque=Plaq
Positive=Pos
Post=Pst
Post=Pst
Post-Operative=PostOp
Postural=Postrl
Preference=Pref
Pregnancy=Preg
Prematurely=Prematur
Pre-Operative=PreOp
Presentation=Present
Pressure=Pressr
Primary = Primry
Primary=Primry
Problem=Prob
Procedure=Proced
Procedure=Proced
Product=Prdct
Professional=Prof
Protective=protect
Provider=Prvdr
Proximal=Proxml
Pyruvate=Pyru
Quadriceps=Quadcps

Qualitative=Qual;
Received=Recv
Referral=Refer
Region=Regn
Rehabilitation=Rehab
Relationship=Relate
Reliability=Reliabl
Reporter=Rptr
Residence=Resdnce
Respiration=Resp
Response=Respsn
Result=Reslt
Return=Rtrn
Revised=Rev
Right=Rt
Route=Rte
Sample=Samp
Satisfaction=Satisfctn
Scanner=Scan
Screen=Scrn
Sedation=Sed
Seizure=Seiz
Sequence=Seq
Services=Srvc
Session=Sessn
Severity=Sev
Shape=Shpe
Shift=Shft
Significance=Signfcnce
Skull=Skul
Social=Socl
Software=Sftwr
Specimen=Specmn
Spoken=Spoke
Start=Strt
Sternocleidomastoid=SCM
Strength=Strgth
Study=Stdy
Subarachnoid hemorrhage=SAH
Subdural hematoma =SDH
Subject=Subj
Substance=Sub

Support=Suprt
Supretentorial=Supratent
Surgical=Surg
Swelling=Swell
Symptom=Symptm
Symptom=Symptm
System=Sys
Systolic=Syst
Temperature=Temp
Terminations= Term
Text=Txt
Therapeutic=Therapu
Therapy Intensity Level= TIL
Tissue=Tiss
Tobacco=Tobco
Traffic=Traf
Training=Traing
Transfusion=Transfn
Transport=Trspt
Trauma=Traum
Traumatic Axonal Injury=TAI
Traumatic= Traumtc
Treated=Treatd
Treatment=Treatmt
Type=Typ
Type=Typ
unexpected=Unexpctd
Value=Val
Vascular=Vasclr;
Vehicular=Vehlr
Venous=Ven
Ventricle=Vent
Ventriculomegaly=Ventculmegly
Version=Ver
Violent=Vio
Volume=Vol
Volumetric=Volumtrc
Voluntary=Vol
Week=Wk
Weight=Wgt
Worsening=Wrse;
Written=Writn

Years=Yrs

APPENDIX B: MEASUREMENT TYPES

Unit Type	Unit Name	Abbreviation	UCUM Code (if available)
Substance Fraction Unit	international units per liter	IU/L	[iU]/L
Substance Fraction Unit	thousands per micro liter	K/uL	10*3/uL
Substance Fraction Unit	millions per micro liter	M/uL	10*6/uL
Substance Fraction Unit	femtoliter	fL	fL
Substance Fraction Unit	grams per decileter	g/dL	g/dL
Substance Fraction Unit	grams per liter	g/L	g/L
Substance Fraction Unit	grams per milliliter	g/mL	g/mL
Substance Fraction Unit	milli international units per milliliter	mIU/mL	m[iU]/mL
Substance Fraction Unit	milli equivalents per liter	mEq/L	meq/L
Substance Fraction Unit	milligrams per deciliter	mg/dL	mg/dL
Substance Fraction Unit	millimoles per kilogram	mmol/kg	mmol/kg
Substance Fraction Unit	millimoles per liter	mmol/L	mmol/L
Substance Fraction Unit	milli osmoles per kilogram	mosm/kg	mosm/kg
Substance Fraction Unit	nanograms per milliliter	ng/mL	ng/mL
Substance Fraction Unit	nanomoles per liter	nmol/L	nmol/L
Substance Fraction Unit	picograms per milliliter	pg/mL	pg/mL
Substance Fraction Unit	picomoles per liter	pmol/L	pmol/L
Substance Fraction Unit	units per liter	U/L	U/L
Substance Fraction Unit	microinternational units per milliliter	uiU/mL	u[iU]/mL
Substance Fraction Unit	micrograms per deciliter	ug/dL	ug/dL
Substance Fraction Unit	micrograms per liter	ug/L	ug/L
Substance Fraction Unit	micrograms per milliliter	ug/mL	ug/mL
Substance Fraction Unit	micromoles per liter	umol/L	umol/L
Substance Fraction Unit	picomoles per micromole	pmol/umol	pmol/umol
Substance Fraction Unit	nanomoles per millimole	nmol/mmol	nmol/mmol
Substance Fraction Unit	nanmoles per millimole creatinine	nmol/mmol Cre	nmol/mmol{Cre}
Substance Fraction Unit	nanmoles per mole	nmol/mol	nmol/mol
Substance Fraction Unit	micromoles per mole	umol/mol	umol/mol
Substance Fraction Unit	millimoles per mole	mmol/mol	mmol/mol
Substance Fraction Unit	millimoles per mole creatinine	mmol/mol Cre	mmol/mol{Cre}
Substance Fraction Unit	micromoles per mole creatinine	umol/mol Cre	umol/mol{Cre}

Substance Fraction Unit	equivalents per micromole	eq/umol	eq/umol
Substance Fraction Unit	equivalents per millimole	eq/mmol	eq/mmol
Substance Fraction Unit	bone collagen equivalents per millimole creatinine	BCE/mmol Cre	{BoneCollagen}eq/mmol{Cre}
Substance Fraction Unit	bone collagen equivalents per micromole creatinine	BCE/umol Cre	{BoneCollagen}eq/umol{Cre}
Volume Fraction Unit	volume percent	Volme %	%{vol}
Volume Fraction Unit	percent oxygen	% Oxygen	%{Oxygen}
Volume Fraction Unit	milliliters per deciliter	cc/dL	mL/dL
Mass or Substance Rate Fraction Units	percent excretion	% Excretion	%{Excretion}
Mass or Substance Rate Fraction Units	percent uptake	% Uptake	%{Uptake}
Rate	rate of centrifugation	Revolutions per minute	rpm
Rate	bloodflow	Liters/minute	
Rate	speed	Miles/hour	
Percentage	percent	Pct	
Mass Content Unit	micrograms per nano gram	ug/ng	ug/ng
Mass Content Unit	nanograms per milligram	ng/mg	ng/mg
Mass Content Unit	nanograms per milligram protein	ng/mg Prot	ng/mg{Protein}
Mass Content Unit	micrograms per milligram creatinine	ug/mg Cre	ug/mg{Cre}
Mass Content Unit	milligrams per milligram	mg/mg	mg/mg
Mass Content Unit	milligrams per milligram creatinine	mg/mg Cre	mg/mg{Cre}
Mass Content Unit	nanograms per gram	ng/g	ng/g
Mass Content Unit	nanogams per gram creatinine	ng/g Cre	ng/g{Cre}
Mass Content Unit	micrograms per gram	ug/g	ug/g
Mass Content Unit	microgram per 100 gram	ug/100 g	ug/[100]g
Mass Content Unit	microgram per gram dry weight	ug/g Dry Weight	ug/g{DryWeight}
Mass Content Unit	microgram per gram creatinine	ug/g Cre	ug/g{Cre}
Mass Content Unit	micrograms per gram hemoglobin	ug/g Hgb	ug/g{Hgb}
Mass Content Unit	milligrams per gram	mg/g	mg/g
Mass Content Unit	milligram per gram creatinine	mg/g Cre	mg/g{Cre}
Mass Content Unit	grams per gram	g/g	g/g
Mass Content Unit	nanograms per kilogram	ng/kg	ng/kg
Mass Content Unit	micrograms per kilogram	ug/kg	ug/kg
Mass Content Unit	milligrams per kilogram	mg/kg	mg/kg

Mass Content Unit	grams per kilogram	g/kg	g/kg
Mass Content Unit	grams per 100 gram	g/100g	g/[100]g
Mass Content Unit	grams per gram creatinine	g/g Cre	g/g{Cre}
Temperature	degree celsius	C	Cel
Temperature	degree farenheit	F	[degF]
Temperature	degree kelvin	K	K
Pressure	millimeters of mercury	mmHg	mm[Hg]
Pressure	kilo pascal	kPa	kPa
Pressure	pounds per square inch	psi	psi
Mass	picogram	pg	pg
Mass	femtogram	fg	fg
Mass	nanogram	ng	ng
Mass	microgram	ug	ug
Mass	micrograms per total volume	ug/Total Volume	ug/{Total Volume}
Mass	micrograms per specimen	ug/Spec	ug/{Specimen}
Mass	milligram	mg	mg
Mass	milligrams per volume	mg/Volume	mg/{Volume}
Mass	milligrams per total volume	mg/Total Volume	mg/{Total Volume}
Mass	gram	g	g
Mass	grams per total weight	g/Total Weight	g/{Total Weight}
Mass	decigram	dg	dg
Mass	centigram	cg	cg
Mass	kilogram	kg	kg
Mass	metric ton	Metric Ton	t
Mass	picrograms per millimeter	pg/mm	
Thermal Resistance	kelvin per watt	K/Watt	K/W
Time	picosecond	ps	ps
Time	nanosecond	ns	ns
Time	microsecond	us	us
Time	millisecond	ms	ms
Time	second	sec	s
Time	kilosecond	ks	ks
Time	megasecond	Ms	Ms
Time	minute	min	min
Time	hour	h	h
Time	day	d	d
Time	week	wk	wk

Time	month	Mo	mo
Time	year	yr	a
Substance	mole	mol	mol
Substance	millimole	mmol	mmol
Substance	millimoles per total volume	mmol/Total Volume	mmol/{TotalVolume}
Substance	femtomole	fmol	fmol
Substance	picomole	pmol	pmol
Substance	micromole	umol	umol
Substance	nanomole	nmol	nmol
Substance	milliosmole	mosm	mosm
Areic Substance Unit	milliequivalents per square meter	meg/m^2	meq/m2
Areic Substance Unit	millimoles per square meter	mmol/m^2	mmol/m2
Area	square inch	in^2	[sin_i]
Area	square feet	ft^2	[sft_i]
Area	square yard	yd^2	[syd_i]
Area	square millimeter	mm^2	mm2
Area	square centimeter	cm^2	cm2
Area	square meter	m^2	m2
Volume	femtoliter	fL	fL
Volume	picoliter	pL	pL
Volume	nanoliter	nL	nL
Volume	microliter	uL	uL
Volume	milliliter	mL	mL
Volume	milliliters per heartbeat	mL/heart beat	mL/{h'b}
Volume	liter	L	L
Volume	deciliter	dL	dL
Volume	centiliter	cL	cL
Volume	kiloliter	kL	kL
Volume	hectoliter	hL	hL
Volume	cubic millimeter	mm^3	
Volume	cubic centimeter	cm^3	
Volume Duration	liter square second per second	L s^2/s	L.s2/s
Number Content Units	per milligram	/mg	/mg
Number Content Units	per gram	/g	/g
Number Content Units	per gram creatinine	/g Cre	/g{creat}

Number Content Units	per gram hemoglobin	/g Hgb	/g{HGB}
Number Content Units	per gram total nitrogen	/g Total Nitrogen	/g{tot`nit}
Number Content Units	per gram total protein	/g Total Protein	/g{tot`prot}
Number Content Units	per gram wet tissue	/g Wet Tissue	/g{wet`tis}
Number Content Units	per kilogram	/kg	/kg
Number Content Units	per kilogram body weight	/kg Body Weight	/kg{body`wt}
Substance Content Unit	femtomoles per milligram	fmol/mg	fmol/mg
Substance Content Unit	nanomoles per milligram	nmol/mg	nmol/mg
Substance Content Unit	micromoles per milligram	umol/mg	umol/mg
Substance Content Unit	micromoles per milligram creatinine	umol/mg Cre	umol/mg{Cre}
Substance Content Unit	moles per kilogram	mol/kg	mol/kg
Substance Content Unit	femtomoles per gram	fmol/g	fmol/g
Substance Content Unit	nanmoles per gram	nmol/g	nmol/g
Substance Content Unit	nanmoles per gram creatinine	nmol/g Cre	nmol/g{Cre}
Substance Content Unit	micromoles per gram	umol/g	umol/g
Substance Content Unit	micromoles per gram creatinine	umol/g Cre	umol/g{Cre}
Substance Content Unit	micromoles per gram hemoglobin	umol/g Hgb	umol/g{Hgb}
Substance Content Unit	millimoles per gram	mmol/g	mmol/g
Substance Content Unit	millimoles per kilogram	mmol/kg	mmol/kg
Substance Content Unit	osmoles per kilogram	osm/kg	osm/kg
Substance Rate Content Unit	milliosmoles per kilogram	mosm/kg	mosm/kg
Substance Rate Content Unit	milliequivalents per gram	meq/g	meq/g
Substance Rate Content Unit	milliequivalents per gram creatinine	meq/g Cre	meq/g{Cre}
Substance Rate Content Unit	milliequivalents per kilogram	meq/kg	meq/kg
Arbitrary Concentration Content Units	international units per gram	IU/g	[IU]/g
Arbitrary Concentration Content Units	international units per gram hemoglobin	IU/g Hgb	[IU]/g{Hgb}
Arbitrary Concentration Content Units	ehrlich units per 100 gram	EU/100 g	{Ehrlich_U}/100g
Arbitrary Concentration Content Units	international units per kilogram	IU/kg	[IU]/kg
Arbitrary Concentration Content Units	micromoles per minute per gram	umol/min/g	umol/min/g
Arbitrary Concentration Content Units	millionunits per gram	mU/g	mU/g

Arbitrary Concentration Content Units	milliunits per gram hemoglobin	mU/g Hgb	mU/g{Hgb}
Arbitrary Concentration Content Units	units per gram	U/g	U/g
Arbitrary Concentration Content Units	units per gram hemoglobin	U/g Hgb	U/g{Hgb}
Arbitrary Concentration Content Units	uniter per gram creatinine	U/g Cre	U/g{Cre}
Arbitrary Concentration Content Units	milliunits per milligram creatinine	mU/mg Cre	mU/mg{Cre}
Arbitrary Concentration Content Units	milliunits per milligram	mU/mg	mU/mg
Arbitrary Concentration Content Units	kilounits per gram	kU/g	kU/g
Arbitrary Concentration Content Units	katal per kilogram	kat/kg	kat/kg
Volume Content Units	milliliters per kilogram	mL/kg	mL/kg
Volume Content Units	liters per kilogram	L/kg	L/kg
Energy Content Units	kilocalories per ounce	Kcal/oz	kCal/[oz_av]
Aeric Number Units	per square meter	/m^2	/m2
Areic Mass Units	grams per square meter	g/m^2	g/m2
Areic Mass Units	kilograms per square meter	kg/m^2	kg/m2
Areic Mass Units	micrograms per square meter	ug/m^2	ug/m2
Areic Mass Units	milligrams per square meter	mg/m^2	mg/m2
Areic Mass Units	nanograms per square meter	ng/m^2	ng/m2
Massive Distance Unit	gram meter	Gram Meter	g.m
Massive Distance Unit	gram meter per heartbeat	Gram Meter/Heartbeat	g.m/{hb}
Massive Distance Unit	gram meter per heartbeat per square meter	Gram Meter/Heartbeat/m^2	g.m/({hb}.m2)
Molar Mass Unit	kilograms per mole	kg/mol	kg/mol
Number Concentration Units	per microliter	/uL	/uL
Number Concentration Units	cells per microliter	cells/uL	{Cells}/uL
Number Concentration Units	red blood cells per microliter	RBC/mm^3	{rbc}/uL

Number Concentration Units	thousands per microliter	$10^3/\mu\text{L}$	$10^3/\mu\text{L}$
Number Concentration Units	millions per microliter	$10^6/\mu\text{L}$	$10^6/\mu\text{L}$
Number Concentration Units	billions per microliter	$10^9/\mu\text{L}$	$10^9/\mu\text{L}$
Number Concentration Units	per milliliter	/mL	/mL
Number Concentration Units	spermatozoa per milliliter	Sperm/mL	{Spermatozoa}/mL
Number Concentration Units	copies per milliliter	Copies/mL	{Copies}/mL
Number Concentration Units	thousand per milliliter	$10^3/\text{mL}$	$10^3/\text{mL}$
Number Concentration Units	thousand copies per milliliter	10^3 copies/mL	$10^3 \{\text{Copies}\}/\text{mL}$
Number Concentration Units	million per milliliter	$10^6/\text{mL}$	$10^6/\text{mL}$
Number Concentration Units	billions per milliliter	$10^9/\text{mL}$	$10^9/\text{mL}$
Number Concentration Units	colony forming units per milliliter	cfu/mL	{cfu}/mL
Number Concentration Units	per deciliter	/dL	/dL
Number Concentration Units	thousand per liter	$10^3/\text{L}$	$10^3/\text{L}$
Number Concentration Units	million per liter	$10^6/\text{L}$	$10^6/\text{L}$
Number Concentration Units	trillion per liter	$10^{12}/\text{L}$	$10^{12}/\text{L}$
Number Concentration Units	billion per liter	$10^9/\text{L}$	$10^9/\text{L}$
Mass Concentration Unit	picograms per millileter	pg/mL	pg/mL
Mass Concentration Unit	nanograms per millileter	ng/mL	ng/mL
Mass Concentration Unit	nanograms per millileter red blood cells	ng/mL RBCs	ng/mL{rbc}
Mass Concentration Unit	micrograms per milliliter	ug/mL	ug/mL
Mass Concentration Unit	grams per millileter	g/mL	g/mL
Mass Concentration Unit	picograms per deciliter	pg/dL	pg/dL
Mass Concentration Unit	nanograms per deciliter	ng/dL	ng/dL
Mass Concentration Unit	micrograms per deciliter	ug/dL	ug/dL
Mass Concentration Unit	micrograms per deciliter red blood cells	ug/dL RBCs	ug/dL{rbc}
Mass Concentration Unit	milligrams per deciliter	mg/dL	mg/dL
Mass Concentration Unit	milligrams phenylketones per deciliter	mg Phe/dL	mg{Phenylketones}/dL

Mass Concentration Unit	grams per deciliter	g/dL	g/dL
Mass Concentration Unit	nanograms per liter	ng/L	ng/L
Mass Concentration Unit	picograms per liter	pg/L	pg/L
Mass Concentration Unit	micrograms per liter	ug/L	ug/L
Mass Concentration Unit	milligrams per liter	mg/L	mg/L
Mass Concentration Unit	grams per liter	g/L	g/L
Mass Concentration Unit	kilograms per liter	kg/L	kg/L
Mass Concentration Unit	milligrams per cubic meter	mg/m ³	mg/m ³
Mass Concentration Unit	kilograms per cubic meter	kg/m ³	kg/m ³
Substance Concentration Unit	femtomoles per milliliter	fmol/mL	fmol/mL
Substance Concentration Unit	picomoles per milliliter	pmol/mL	pmol/mL
Substance Concentration Unit	nanomoles per milliliter	nmol/mL	nmol/mL
Substance Concentration Unit	micromoles per milliliter	umol/mL	umol/mL
Substance Concentration Unit	moles per milliliter	mol/mL	mol/mL
Substance Concentration Unit	picomoles per deciliter	pmol/dL	pmol/dL
Substance Concentration Unit	nanomoles per deciliter	nmol/dL	nmol/dL
Substance Concentration Unit	micromoles per deciliter	umol/dL	umol/dL
Substance Concentration Unit	millimoles per deciliter	mmol/dL	mmol/dL
Substance Concentration Unit	millimoles per liter	mmol/L	mmol/L
Substance Concentration Unit	picomoles per liter	pmol/L	pmol/L
Substance Concentration Unit	nanomoles per liter	nmol/L	nmol/L
Substance Concentration Unit	micromoles per liter	umol/L	umol/L
Substance Concentration Unit	moles per liter	mol/L	mol/L
Substance Concentration Unit	moles per cubic meter	mol/m ³	mol/m ³
Substance Concentration Unit	microequivalents per milliliter	ueg/mL	ueq/mL
Substance Concentration Unit	milliequivalent per milliliter	meg/mL	meq/mL
Substance Concentration Unit	equivalents per liter	eg/L	eq/L

Substance Concentration Unit	milliosmoles per liter	mOsm/L	mosm/L
Substance Concentration Unit	osmoles per liter	Osm/L	osm/L
Substance Concentration Unit	milligrams per 100 milliliters	mg/100mL	
Arbitrary Concentration Units	microinternational units per milliliter	uiU/mL	u[iU]/mL
Arbitrary Concentration Units	milliinternational units per milliliter	mIU/mL	m[iU]/mL
Arbitrary Concentration Units	ig g phospholipid units per milliliter	IgG Phospholipid U/mL	{IgGPhospholipid}U /mL
Arbitrary Concentration Units	ig mp phospholipid units per milliliter	IgM Phospholipid U/mL	{IgMProphospholipid}U /mL
Arbitrary Concentration Units	complement ch 50 units per milliliter	CH50 U/mL	{ComplementCh50} U/mL
Arbitrary Concentration Units	ig a phospholipid units per milliliter	IgA Phospholipid U/mL	{IgAProphospholipid}U /mL
Arbitrary Concentration Units	elisa units per milliliter	Elisa U/mL	{Elisa_U}/mL
Arbitrary Concentration Units	international units per milliliter	IU/mL	[iU]/mL
Arbitrary Concentration Units	kilointernational units per milliliter	kIU/mL	k[iU]/mL
Arbitrary Concentration Units	international units per deciliter	IU/dL	[iU]/dL
Arbitrary Concentration Units	ehrlich units per deciliter	EU/dL	{Ehrlich_U}/dL
Arbitrary Concentration Units	milliinternational units per liter	mIU/L	m[iU]/L
Arbitrary Concentration Units	international units per liter	IU/L	[iU]/L
pH	ph	pH	[pH]
Unity	log10	log 10	[lg]
Unity	million per specimen	x10^6/spec	10*6/{Specimen}
Unity	per total count	/Total	/{tot}
Unity	thousand	x10^3	10*3
Unity	thousand red blood cells	x10^3 RBCs	10*3.{RBC}
Unity	one hundred thousand	x10^5	10*5
Unity	million	x10^6	10*6
Unity	ten to eighth	x10^8	10*8
Length	inch	in	[in_i]
Length	feet	ft	[ft_i]

Length	yard	yd	[yd_i]
Length	femtometer	fm	fm
Length	picometer	pm	pm
Length	nanometer	nm	nm
Length	micrometer	um	um
Length	millimeter	mm	mm
Length	centimeter	cm	cm
Length	decimeter	dm	dm
Length	meter	m	m
Length	kilometer	km	km
Heart Rate	beats per minute	bpm	
Respiratory Rate	breaths per minute	bpm	
Enzyme Activity	katal	kat	
Cell count	cells per cubic millimeter	c/mm	
Concentration	milligrams per kilograms of body mass	mg/kg	
Cell Count	cells (thousands)/cubic millimeter	K/uL or K/mm ³	
Bandwidth	hertz per pixel	Hz/Pixel	